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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,963	02/27/2004	Radha Sen	200312102-1	9177
22879 7590 03/06/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER YOON, TAE H				
ART UNIT 1796		PAPER NUMBER		
NOTIFICATION DATE 03/06/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/789,963

**Applicant(s)**

SEN ET AL.

**Examiner**

Tae H. Yoon

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 48, 49, 51-53, 55-58, 71, 72 and 80-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 48, 49, 51-53, 55-58, 71, 72 and 80-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

The examiner would consider the amendment even though he disagrees with applicant's assertion that applicant can amend claim any way before the final rejection (He can amend the claims within the scope of claims elected. In this case the examined claims recite only two layers and the examiner did not need to request applicant to elect two or three layers, or even five layers contrary to applicant's assertion that he did not add subject matter to the claims). However, the examination under merit would be given for sake of a customer service at this time.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 48, 49, 51-53, 55-58, 71, 72 and 80-90 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is NEW MATTER rejection since newly recited "deposited as a liquid on said substrate" does not have support in originally failed specification. Applicant points to PP 0021, but the examiner does not see any support for the amendment.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 48, 49, 51-53, 55-58, 71, 72 and 80-90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear whether said deposited liquid stays as a liquid or not on said substrate, and thus claims are indefinite.

The recited preamble, "The microporous coating of ---", in claims 49, 50-53, 55-58, 71, 72 and 80-90 lack a proper antecedent basis in claim 48 wherein "A print medium" is claimed now.

Claims 81-84 are confusing and indefinite since they recite polymers (such as polystyrene) for a core material and monomers (such as n-ethylhexylacrylate) for a shell material. Consistency is needed.

The recited "said shell material comprises a coalescing agent" in claim 90 is confusing and indefinite since said coalescing agent is a solvent as taught by Kasperchik et al (middle of col. 8 in US 7,086,732), and a solvent cannot form a shell. Addition of "further" before "comprises" may be needed.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 48, 49, 51-53, 55, 57, 58, 71, 72, 86, 87, and 80-90 are rejected under 35 U.S.C. 102(e) as anticipated by Kasperchik et al (US 7.086,732).

Rejection is maintained for reason of record with following response.

Fig. 1, claim 1 and the disclosure on cols. 3 and 4 teach a print medium having the instant three layers.

Again, applicant asserts that Kasperchik et al teaches: "The colorant-receiving layer 8 may also include a small amount of polymer binder ---", and that thus, Kasperchik et al fail to meet the instantly recited "without requiring a second binder". However, said **"may also include" is an optional expression**, and thus, **said polymer binder is an optional component**. Also, see claims of Kasperchik et al wherein no polymer binder is recited.

Applicant asserts that Kasperchik's claims are open-ended and do not recite every embodiment of an invention, but the at least claims themselves are protected under patent. Thus, claims would meet the invention, and presence of other components (such as a second binder) is permitted, but is **not required** contrary to applicant's assertion.

Core-shell particles in example 1 would meet the claim 86 inherently.

Claims 48, 49, 51-53, 55, 57, 58, 71, 72, 80 and 86-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasperchik et al (US 7.086,732).

The instant invention further recites an amount of core material and amounts per square meter over Kasperchik et al who teach 50wt% core material in example 1. The instantly recited more than 50 wt% in claim 80 encompasses 50.1 wt%, for example, and thus it would be obvious over 50wt% in example 1 of Kasperchik et al. Kasperchik et al also teach an amount of core-shell latex (bottom of col. 5) and first microporous layer (colorant-receiving layer, bridging PP on cols. 6 and 7).

It would have been obvious to one skilled in the art at the time of invention to utilize the instant amounts of components per square meter in Kasperchik et al since Kasperchik et al teach the amounts in different terms encompassing the instant unit or it would be obvious design choice, and to utilize more than 50 wt% of core material since Kasperchik et al teach 50wt% core material in example 1 and since changing amounts of the given components would be considered a routine practice absent showing otherwise.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1796

Tae H Yoon  
Primary Examiner  
Art Unit 1796

THY/February 28, 2008

/Tae H Yoon/